

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-3 are pending in this application. Claim 1 is independent. The remaining claims depend, directly or indirectly, from claim 1.

Claim Amendments

Claims 1-3 have been amended in this reply to clarify the present invention. The language "end face cam" has been amended to read "end face cam surface" per the Examiner's suggestion in order to overcome the Examiner's objections to claims 1-3. No new matter has been added by way of this amendment, as support for this amendment may be found, for example, in Figures 7 and 8A of the originally filed application.

Claim Objections

The Examiner objected to claims 1-3, asserting that the "plurality of end face cams" recited in the claims do not appear to be separate cams, but instead appear to be two profiled surfaces of a single cam member. To overcome this objection, the Examiner suggests amending the phrase "plurality of end face cams" to read "a plurality of end face cam surfaces." As explained above, the claims have been amended per the Examiner's request to overcome this objection. Accordingly, withdrawal of the objection is respectfully requested.

Claim Rejections under 35 U.S.C. § 102

Claims 1-3 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,886,221 ("Minami"). This rejection is respectfully traversed.

Claim 1 recites a hinge apparatus including a first hinge member, a second hinge member turnably connected to the first hinge member, a moveable member, and a biasing member. The movable member is arranged on a turning axial line of the first and second hinge members in such a manner as to be turnable about the turning axial line and movable in the direction of the turning axial line. The biasing means is then adapted to bias the movable member toward the first hinge member.

Further, the first hinge member and the movable member have confronting surfaces, in which one of the confronting surfaces is provided with a plurality of end face cam surfaces extending in the peripheral direction about the turning axial line and equally spacedly arranged in the peripheral direction about the turning axial line. This confronting surface is also provided with a raised wall surface disposed between two of the end face cam surfaces which are adjacent in the peripheral direction. A distal end portion of the raised wall surface extends towards the other of the confronting surfaces in the direction of the turning axial line. Furthermore, a recess is formed in a basal end portion of the raised wall surface, wherein the basal end portion is located spacedly from the other of the confronting surfaces. The recess is located at the intersection of the basal end portion of the raised wall surface and the end face cam surface so as to extend into the raised wall surface *in the peripheral direction about the turning axial line*. The raised wall surface is then

located between the recess and the other of said confronting surfaces in the direction of the turning axial line.

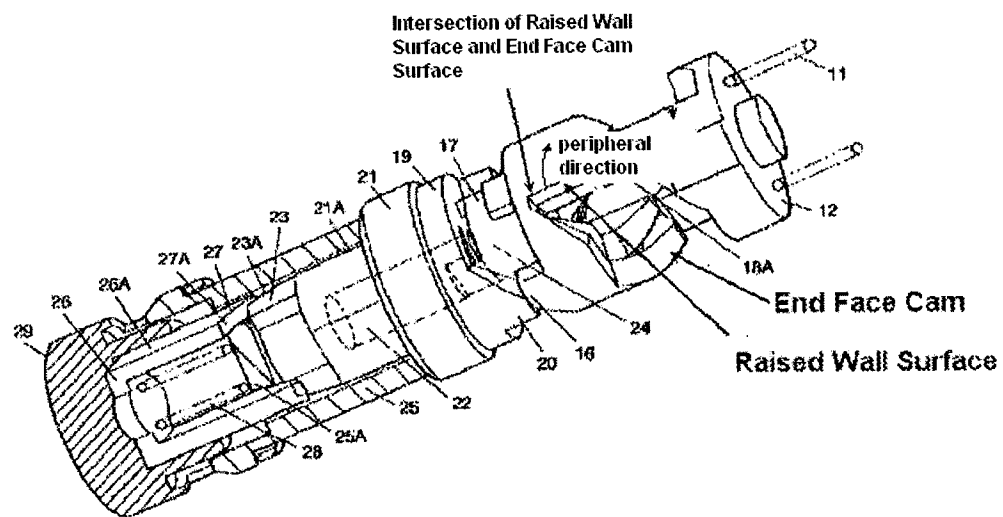
Minami, on the other hand, shows in Figure 2 a folding device 32 having a movable part 12, a metallic slider 14, an actuator case 25, an actuator return spring 28, and stationary cam 15. In the Office Action, the Examiner asserts that “vertical wall next to 15A” reads on the raised wall surface of the claim, and that “[a] recess...is formed a basal end portion of said raised wall surface and located at the intersection of the raised wall surface and the end face cam so as to extend into the raised wall portion in the peripheral direction about the turning axial line....”

Applicant disagrees with the Examiner’s assertion regarding the presence of the claimed recess. Claim 1 recites, in part, “a plurality of end face cam surfaces extending in a peripheral direction about the turning axial line.” In addition, claim 1 recites the presence of a “raised wall surface disposed between two of said end face cam surfaces which are adjacent in the peripheral direction.” Located at the basal end of this raised wall surface is, as recited in claim 1, a “recess located at the intersection of said basal end portion of said raised wall surface and said end face cam surface so as to extend into said raised wall surface in the peripheral direction about said turning axial line.” Thus, two key aspects of the recess are (1) that it is located at the intersection of the two cam surfaces and (2) that the recess extends *into* the raised wall surface.

However, as can be seen in Annotated Minami Figure 1 shown below, it is clear that Minami does not disclose the recess as claimed. Marked in the annotated figure is the intersection of the raised wall surface and the end face cam surface. In addition, near the joint, Applicant calls

attention to the annotation showing an arrow pointing in the peripheral direction. It can clearly be seen that no recess extends into the raised wall portion in peripheral direction as required by claim 1. Therefore, in contrast to the claimed invention, the raised wall surface of Minami joins the end cam surface, at a right angle, without a recess.

Annotated Figure 1 (No Recess)



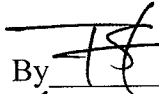
In view of the above, Minami fails show or suggest all of the limitations of claim 1. Accordingly, independent claim 1 is patentable over Minami, at least for the above reasons. Claims 2 and 3 depend, either directly or indirectly, from claim 1. Thus, claims 2 and 3 are patentable over Minami, at least for the same reason. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 12088/042001).

Dated: June 29, 2010

Respectfully submitted,

By  #45,079
Jonathan P. Osha ~~Francis Scherer~~
Registration No.: 33,986
OSHA · LIANG LLP
909 Fannin Street, Suite 3500
Houston, Texas 77010
(713) 228-8600
(713) 228-8778 (Fax)
Attorney for Applicant